

RECOMBINANT VIRUS EXPRESSING FOREIGN DNA ENCODING  
FELINE CD80, FELINE CD86, FELINE CD28, FELINE CTLA-4 OR  
FELINE INTERFERON- $\gamma$  AND USES THEREOF

5 ABSTRACT OF THE DISCLOSURE

10 The present invention involves a recombinant virus which  
comprises at least one foreign nucleic acid inserted  
within a non-essential region of the viral genome of a  
virus, wherein each such foreign nucleic acid encodes a  
protein. The protein which is encoded is selected from  
the groups consisting of a feline CD28 protein or an  
immunogenic portion thereof, a feline CD80 protein or an  
immunogenic portion thereof, a feline CD86 protein or an  
immunogenic portion thereof, or a feline CTLA-4 protein  
15 or an immunogenic portion thereof. The protein is  
capable of being expressed when the recombinant virus is  
introduced into an appropriate host. The present  
invention also involves a recombinant virus further  
comprising a foreign nucleic acid encoding an immunogen  
20 derived from a pathogen. The present invention also  
comprises recombinant viruses which are capable of  
enhancing an immune response in a feline. The present  
invention also comprises recombinant viruses which are  
capable of suppressing an immune response in a feline.